

WHAT IS CLAIMED IS:

1. A resin sheet containing dispersed particles, which comprises a hard coat layer, an epoxy resin layer comprising 100 parts by weight of an epoxy resin and up to 200 parts by weight of a diffuser having a refractive index different from that of the epoxy resin and having an average particle diameter of from 0.2 to 100 μm , and a reflecting layer comprising a thin metal layer, wherein the diffuser localizes so as to have a concentration distribution in the direction of the thickness of the epoxy resin layer.

2. The resin sheet containing dispersed particles of claim 1, wherein the epoxy resin layer consists of a single layer or comprises superposed layers comprising a diffuser-containing layer and a diffuser-free layer adhered thereto.

3. The resin sheet containing dispersed particles of claim 1, wherein the epoxy resin layer is an outermost layer and the diffuser localizes on the outermost side of the epoxy resin layer, the outermost-side surface of the epoxy resin layer being smooth.

4. The resin sheet containing dispersed particles of claim 1, wherein the difference in refractive index between the diffuser and the epoxy resin is from 0.03 to 0.10.

5. The resin sheet containing dispersed particles of claim 1, which has an oxygen permeability of $0.3 \text{ cc/m}^2 \cdot 24\text{h} \cdot \text{atm}$ or lower.

6. A liquid crystal display which uses the resin sheet

containing dispersed particles of claim 1.

7. A resin sheet containing dispersed particles, which comprises a hard coat layer, an epoxy resin layer comprising 100 parts by weight of an epoxy resin and up to 200 parts by weight of a diffuser having a refractive index different from that of the epoxy resin and having an average particle diameter of from 0.2 to 100 μm , and an inorganic gas barrier layer, wherein the diffuser localizes so as to have a concentration distribution in the direction of the thickness of the epoxy resin layer.

8. The resin sheet containing dispersed particles of claim 7, wherein the epoxy resin layer consists of a single layer or comprises superposed layers comprising a diffuser-containing layer and a diffuser-free layer adhered thereto.

9. The resin sheet containing dispersed particles of claim 7, wherein the epoxy resin layer is an outermost layer and the diffuser localizes on the outermost side of the epoxy resin layer, the outermost-side surface of the epoxy resin layer being smooth.

10. The resin sheet containing dispersed particles of claim 7, wherein the difference in refractive index between the diffuser and the epoxy resin is from 0.03 to 0.10.

11. The resin sheet containing dispersed particles of claim 7, wherein the inorganic gas barrier layer comprises a silicon oxide in which the ratio of the number of oxygen atoms to that of silicon atoms is from 1.5 to 2.0.

12. The resin sheet containing dispersed particles of claim 7, wherein the inorganic gas barrier layer comprises a silicon nitride in which the ratio of the number of nitrogen atoms to that of silicon atoms is from 1.0 to 4/3.

13. The resin sheet containing dispersed particles of claim 7, wherein the inorganic gas barrier layer has a thickness of from 5 to 200 nm.

14. The resin sheet containing dispersed particles of claim 7, which has a moisture permeability of $10 \text{ g/m}^2 \cdot 24 \text{ h} \cdot \text{atm}$ or lower.

15. A liquid crystal display which uses the resin sheet containing dispersed particles of claim 7.

16. A resin sheet containing dispersed particles, which comprises a hard coat layer, an epoxy resin layer comprising 100 parts by weight of an epoxy resin and up to 200 parts by weight of a diffuser having a refractive index different from that of the epoxy resin and having an average particle diameter of from 0.2 to 100 μm , a gas barrier layer, and a color filter layer, wherein the diffuser localizes so as to have a concentration distribution in the direction of the thickness of the epoxy resin layer.

17. The resin sheet containing dispersed particles of claim 16, wherein the epoxy resin layer consists of a single layer or comprises superposed layers comprising a diffuser-containing layer and a diffuser-free layer adherent thereto.

18. The resin sheet containing dispersed particles

of claim 16, wherein the epoxy resin layer is an outermost layer and the diffuser localizes on the outermost side of the epoxy resin layer, the outermost-side surface of the epoxy resin layer being smooth.

19. The resin sheet containing dispersed particles of claim 16, wherein the difference in refractive index between the diffuser and the epoxy resin is from 0.03 to 0.10.

20. A process for producing a resin sheet containing dispersed particles which comprises a hard coat layer, an epoxy resin layer comprising 100 parts by weight of an epoxy resin and up to 200 parts by weight of a diffuser having a refractive index different from that of the epoxy resin and having an average particle diameter of from 0.2 to 100 μm , a gas barrier layer, and a color filter layer and in which the diffuser localizes so as to have a concentration distribution in the direction of the thickness of the epoxy resin layer, the process comprising the steps of successively superposing a color filter layer, a gas barrier layer, and the epoxy resin layer in this order on a substrate coated with a hard coat layer.

21. A process for producing a resin sheet containing dispersed particles, which comprises a hard coat layer, an epoxy resin layer comprising 100 parts by weight of an epoxy resin and up to 200 parts by weight of a diffuser having a refractive index different from that of the epoxy resin and having an average particle diameter of from 0.2 to 100 μm , a gas barrier layer, and a color filter layer and in which the diffuser localizes so as to have a concentration distribution

in the direction of the thickness of the epoxy resin layer, the process comprising the steps of successively superposing a gas barrier layer, a color filter layer, and the epoxy resin layer in this order on a substrate coated with a hard coat layer.

22. The process for producing a resin sheet containing dispersed particles of claim 20, which includes the step of superposing the color filter layer by ink-jet printing in a flow casting process.

23. The process for producing a resin sheet containing dispersed particles of claim 20, wherein the substrate has a surface roughness (Ra) of 10 nm or lower.

24. The process for producing a resin sheet containing dispersed particles of claim 20, wherein the substrate has an A1/A0 ratio of from 1 to 1.00003, provided that A0 is the distance between two points on the substrate as measured at 25°C and 20% RH and A1 is the distance between the two points as measured at 25°C and 80% RH.

25. A liquid crystal display which uses the resin sheet containing dispersed particles of claim 16.